

National 4 Homework 25

Questions 1, 2, & 4 are Non Calculator

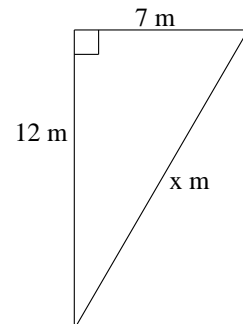
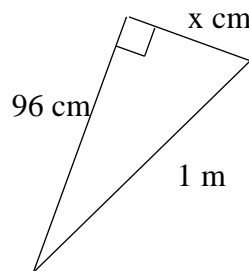
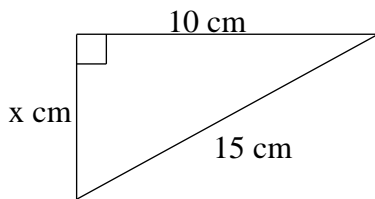
1. Change the subject of each formula to the letter shown in brackets [].

a) $P = I \div f$ [f] b) $9y - 6 = 4 + x$ [y] c) $5y = 4z - x$ [z] d) $P = IV$ [V]

2. The inside of a one litre orange juice carton measures 6 cm by 8 cm by 21 cm. Will it hold one litre of juice? You must give reasons for your answer.



3. Calculate the length of the side marked x in each of the right angled triangles below.



4. A bicycle wheel has a diameter of 62 cm.

- a) How far does the bike travel when the wheel goes round once?
- b) To the nearest 100 turns how often does the wheel rotate during a cycle run of 15 km ?

5.



Three rugby teams play in the same town.
Team A have won 5 out of their 12 games.
Team B have won 15 out of their 32 games.
Team C have won 11 out of their 28 games.

Which team has the best winning record?

Justify your answer by calculation.

6. The distance from Perth to London, by rail, is 490 miles. The train which leaves Perth Station at 09:10 hours arrives in London King's Cross Station at 15:40 hours.

What was the train's average speed in miles per hour?